

Title (en)

Method and system for determining 3-axis spacecraft attitude

Title (de)

Verfahren und Einrichtung zur Bestimmung der Lage eines Raumfahrzeuges in drei Achsen

Title (fr)

Méthode et système pour déterminer l'attitude d'un véhicule spatial par rapport à trois axes

Publication

**EP 0589387 B1 19970402 (EN)**

Application

**EP 93115092 A 19930920**

Priority

- US 94768492 A 19920921
- US 94768692 A 19920921

Abstract (en)

[origin: EP0589387A1] A three axis attitude orientation system for a spacecraft in orbit which employs a single UV sensor (18). The single sensor provides roll and pitch information by locating the centroid of the earth and using this as a reference point. The system determines yaw by tracking the position of stars which appear in the field of view around the earth. Three axis attitude is determined through ultraviolet imaging of the earth's limb and adjacent stars. A non-conventional wide angle optics assembly (12, 14) and intensified CCD array (20, 22) are utilized for this purpose. <IMAGE>

IPC 1-7

**B64G 1/36**; **G01S 3/786**

IPC 8 full level

**B64G 1/36** (2006.01); **G01S 3/786** (2006.01)

CPC (source: EP)

**B64G 1/361** (2013.01); **B64G 1/365** (2013.01); **G01S 3/7868** (2013.01)

Cited by

CN105842724A; RU2469266C2; CN102745345A; RU2470258C1; CN105928527A; CN103604443A; CN104290931A; DE19846690A1; DE19846690B4; CN105300376A; US6917025B1; WO0022381A1

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